

Fig. 1

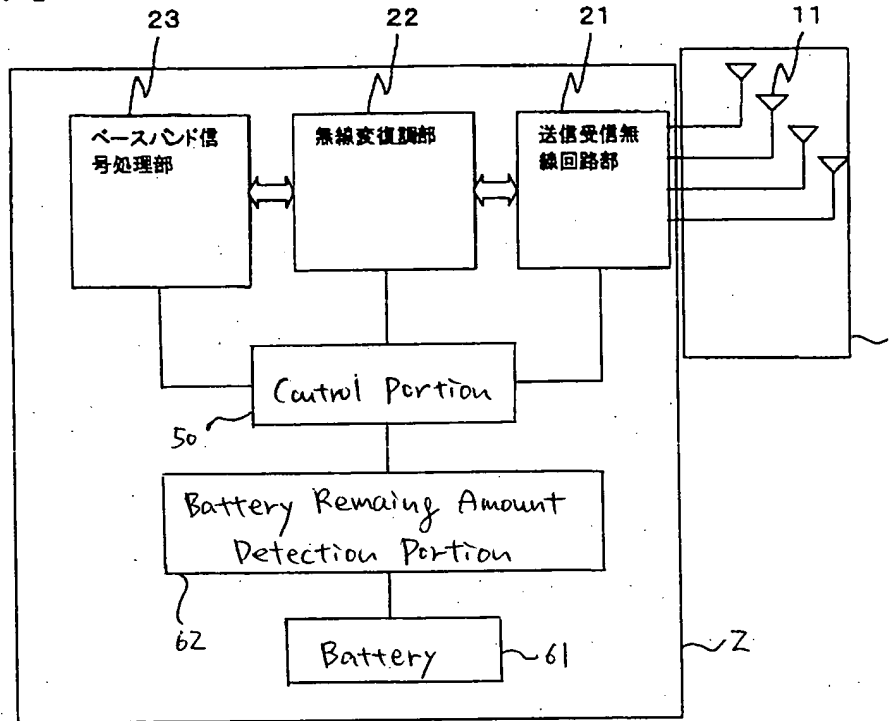
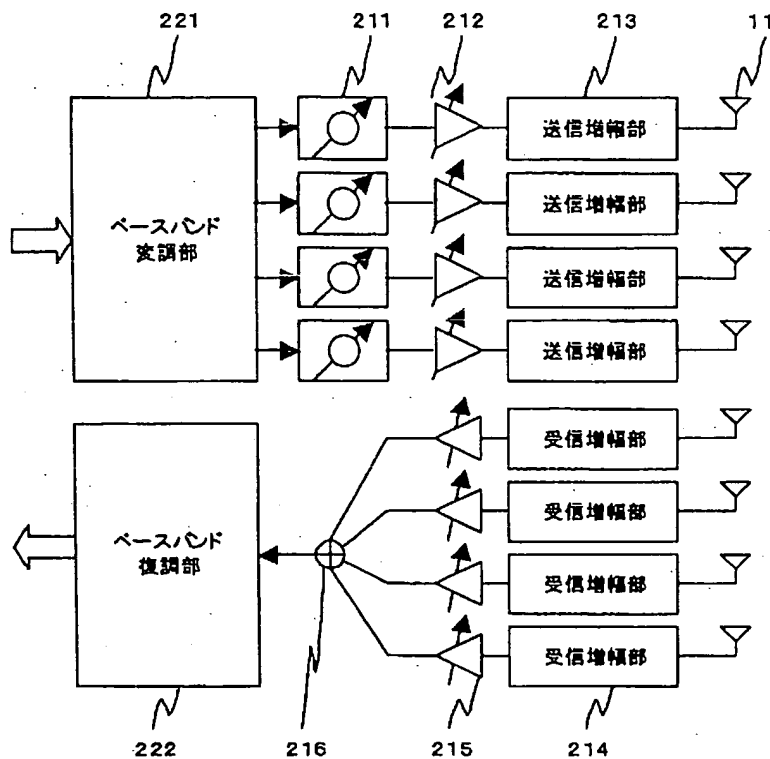


Fig. 2



213 TRANSMISSION AMPLIFIER

214 RECEPTION AMPLIFIER

221 BASEBAND MODULATOR

222 BASEBAND DEMODULATOR

Fig. 3

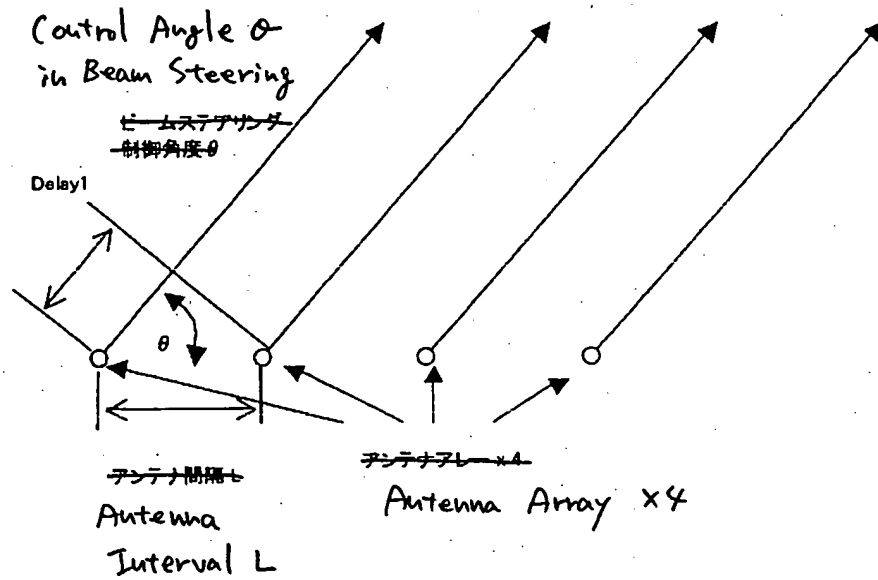
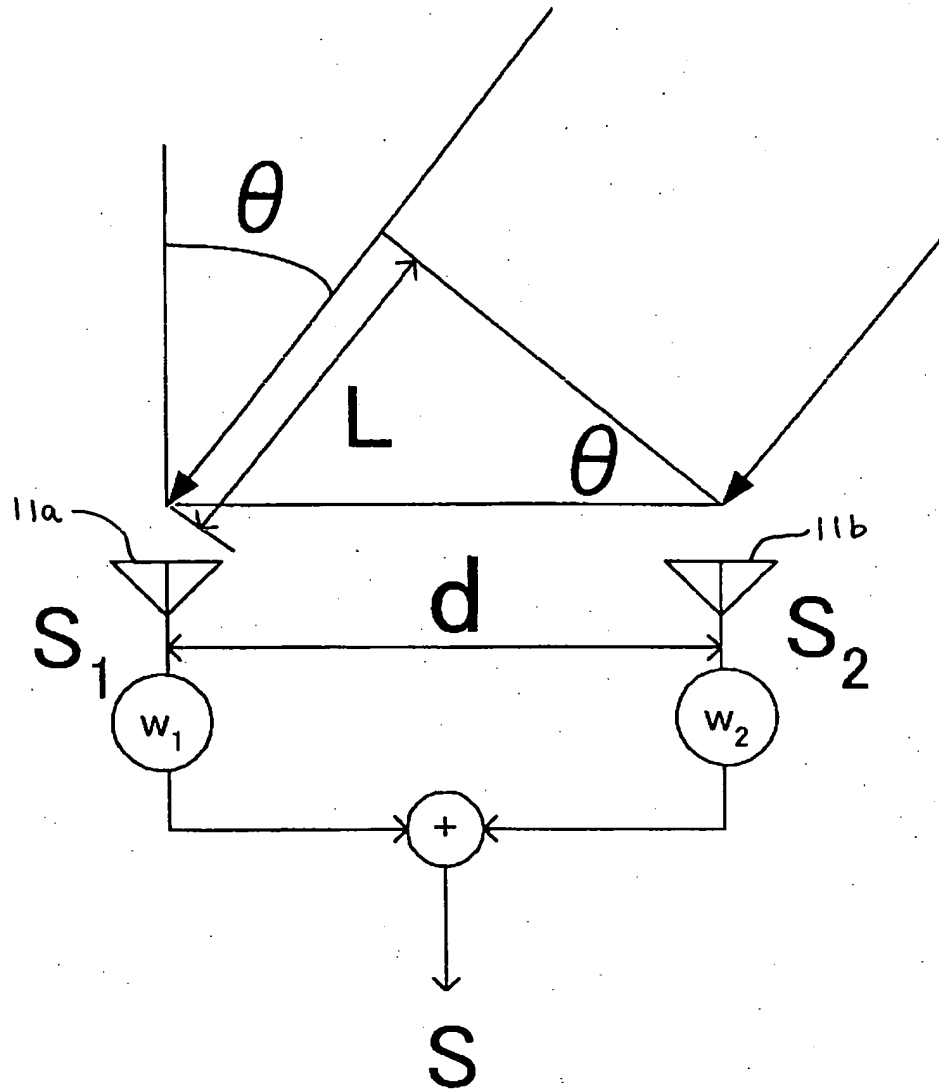


Fig. 4



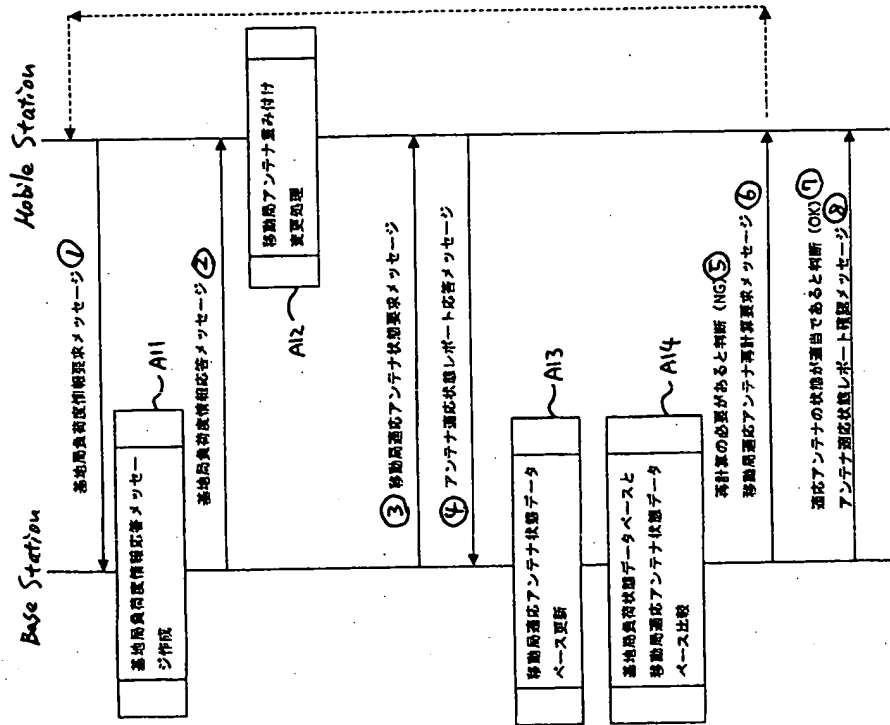


Fig. 5

All: Create Base Station Load Factor Information
Response Message

A12: Processing For Changing Weighting Of Antenna Of Mobile Station

A13: Update Mobile Station Adaptive Antenna State Database

A14: Compare Base Station Load Condition Database With Mobile Station Adaptive Antenna State Database

① Base Station Load Factor Information Request Message

② Base Station Load Factor Information Response Message

③ Mobile Station Adaptive Antenna State Request Message

④ Antenna Adaptive State Report Response Message

⑤ Decide That Recalculation Is Necessary (NG)

⑥ Mobile Station Adaptive Antenna Recalculation Request Message

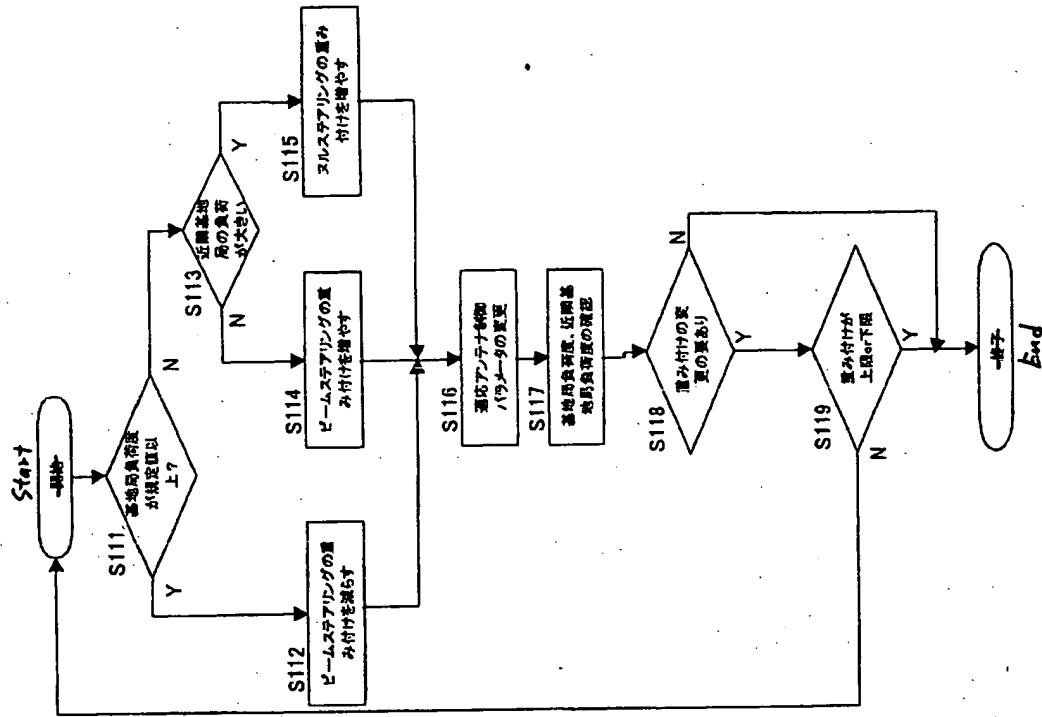
⑦ Decide That State Of Adaptive Antenna Is Proper
(OK)

⑧ Antenna Adaptive State Report Confirmation Message

Fig. 6
Operating Frequency Band

| 運用周波数帯 | Urban | Suburbs | Vehicular | Handoff |
|-------------------|----------|----------|-----------|----------|
| JAPAN 800MHz Band | (WA, WB) | (WA, WB) | (WA, WB) | (WA, WB) |
| USA 800MHz Band | (WA, WB) | (WA, WB) | (WA, WB) | (WA, WB) |
| USA 1900MHz Band | (WA, WB) | (WA, WB) | (WA, WB) | (WA, WB) |
| Korea 1900MHz | (WA, WB) | (WA, WB) | (WA, WB) | (WA, WB) |

Fig. 7



S111: Base Station Load Factor Is Larger Than Or
Equal To Specified Value?

S112: Decrease Weighting Of Beam Steering

S113: Load Of Adjacent Base Station Is Large?

S114: Increase Weighting Of Beam Steering

S115: Increase Weighting Of Null Steering

S116: Change In Control Parameter Of Adaptive
Antenna

S117: Confirmation Of Base Station Load Factor And
Adjacent Base Station Load Factor

S118: It Is Necessary To Change Weighting?

S119: Weighting Is Upper Limit Or Lower Limit?

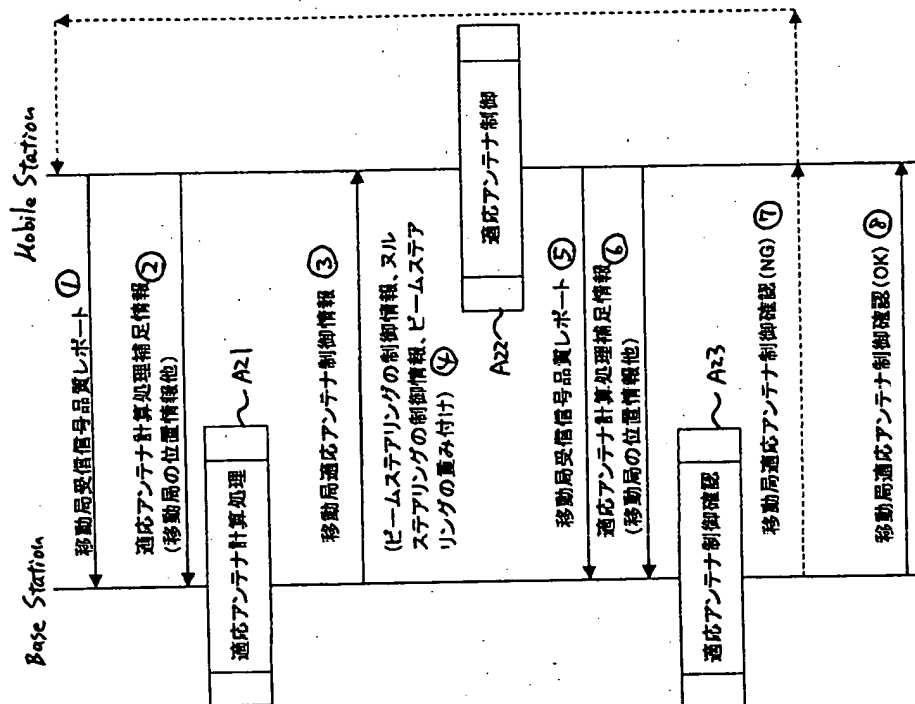


Fig. 8

- A21 Adaptive Antenna Calculation Processing
- A22 Adaptive Antenna Control
- A23 Adaptive Antenna Control Confirmation
- ① Mobile Station Receiving Signal Quality Report
- ② Adaptive Antenna Calculation Processing
Supplementary Information
(Information Etc. About Position Of Mobile Station)
- ③ Mobile Station Adaptive Antenna Control
Information
- ④ (Information About Beam Steering Control,
Information About Null Steering Control,
Weighting Of Beam Steering)
- ⑤ Mobile Station Receiving Signal Quality Report
- ⑥ Adaptive Antenna Calculation Processing
Supplementary Information
(Information Etc. About Position Of Mobile Station)
- ⑦ Mobile Station Adaptive Antenna Control
Confirmation (NG)
- ⑧ Mobile Station Adaptive Antenna Control
Confirmation (OK)

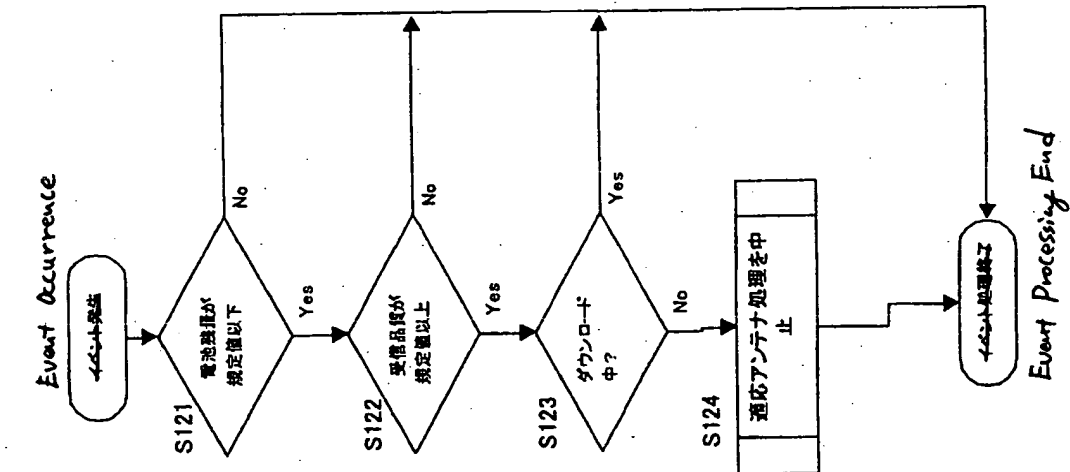


Fig. 9

S121: Battery Remaining Amount Is Smaller Than Or

Equal To Specified Value?

S122: Receiving Quality Is Larger Than Or Equal To

Specified Value?

S123: In Downloading?

S124: Stop Adaptive Antenna Processing